<u>**AMENDMENTS TO THE CLAIMS**</u>

Please substitute the following claims for the same-numbered claims in the application:

1.   (Currently Amended) A computer-implemented method of mining association rules over transactions from datasets while maintaining privacy of individual transactions within said datasets through randomization, said method comprising:

randomizing, by a server, an original dataset to create a randomized dataset, said randomizing comprising:

randomly selecting true items from each transaction in said original dataset;

randomly dropping some of said true items that were randomly selected from each transaction in said original dataset; and

randomly inserting replacing some of said true items that were randomly dropped with false items into each transaction in said original dataset;

collecting, by said server, said randomized dataset in a database;

determining, by said server, support of an association rule in said randomized dataset;

estimating, by said server, support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

outputting, by said server, said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said randomizing, privacy breaches of said individual transactions are controlled.

2.   (Previously Presented) The method according to claim 1, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

3.   (Previously Presented) The method according to claim 1, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

4.   (Currently Amended) The method according to claim 1, wherein said dropping ~~of said true items~~ and said <u>replacing</u> ~~inserting of said false items~~ are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

5.   (Previously Presented) The method according to claim 7, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

6.   (Currently Amended) The method according to claim 1, wherein said dropping ~~of said true items~~ and said <u>replacing</u> ~~inserting of said false items~~ are performed independently on said transactions prior to said transactions being collected in a database.

7.   (Currently Amended) A computer-implemented method of mining association rules from databases while maintaining privacy of individual transactions within said databases through randomization, said method comprising:

randomizing, by a server, an original dataset to create a randomized dataset, said randomizing comprising:

randomly selecting true items from each transaction in said original dataset;

randomly dropping some of said true items that were randomly selected from each transaction in said original dataset;

randomly ~~inserting~~ replacing some of said true items that were randomly dropped with false items ~~into each transaction in said original dataset~~;

collecting, by said server, said randomized dataset in a database;

mining, by said server, said database to recover an association rule in said original dataset after said dropping and replacing ~~inserting~~ processes, wherein said mining comprising:

determining support for said association rule in said randomized dataset;

estimating support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said randomizing, privacy breaches of said individual transactions are controlled during said mining.

8.   (Previously Presented) The method according to claim 7, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

9.   (Previously Presented) The method according to claim 7, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

10.   (Currently Amended) The method according to claim 7, wherein said dropping ~~of said true items~~ and said replacing ~~inserting of said false items~~ are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

11.   (Previously Presented) The method according to claim 7, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

12.   (Currently Amended) The method according to claim 7, wherein said dropping and said ~~inserting~~ replacing are performed independently on said transactions prior to said transactions being collected in said database.

13. (Currently Amended) A computer-implemented method of mining association rules from datasets while maintaining privacy of individual transactions within said datasets through randomization, said method comprising:

creating, by a server, randomized transactions from an original dataset by:

randomly selecting true items from each transaction in said original dataset;

randomly dropping some of said true items that were randomly selected; ~~from each transaction in said original dataset,~~ and

randomly ~~inserting~~ replacing some of said true items that were randomly dropped with false items ~~into each transaction in said original dataset;~~

creating, by said server, a randomized dataset by collecting said randomized transactions;

collecting, by said server, said randomized dataset in a database; and

mining, by said server, said database to recover an association rule in said original dataset after said dropping and replacing ~~inserting~~ processes, wherein said mining comprises:

determining support for said association rule in said randomized dataset;

estimating support of said association rule in said original dataset based on said support for said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said creating of said randomized transactions, privacy breaches of said individual transactions are controlled during said mining.

14.   (Previously Presented) The method according to claim 12, wherein said process of creating randomized transactions comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

15.   (Previously Presented) The method according to claim 13, wherein said process of creating randomized transactions is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

16.   (Currently Amended) The method in claim 13, wherein said dropping ~~of said true items~~ and said <u>replacing</u> ~~inserting of said false items~~ are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

17.   (Previously Presented) The method according to claim 16, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

18.   (Previously Presented) The method according to claim 13, wherein said process of creating randomized transactions is performed independently on said transactions prior to the transactions being collected in said database.

19.   (Currently Amended) A computer program product on a computer-readable medium and tangibly embodying a program of instructions executable by a computer to perform a method of mining association rules from databases while maintaining privacy of individual transactions within said databases through randomization, said method comprising:

   randomizing an original dataset to create a randomized dataset, said randomizing comprising:

      randomly selecting true items from each transaction in said original dataset;

      randomly dropping some of said true items that were randomly selected from each transaction in said original dataset; and

      randomly inserting replacing some of said true items that were randomly dropped with false items into each transaction in said original dataset;

   collecting said randomized dataset in a database; and

   mining said database to recover an association rule in said original dataset after said dropping and inserting replacing processes, wherein said mining comprises:

      determining support for said association rule in said randomized dataset;

      estimating support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said randomizing, privacy breaches of said individual transactions are controlled during said mining.

20.   (Previously Presented) The computer program product according to claim 19, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

21.   (Previously Presented) The computer program product according to claim 19, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

22.   (Currently Amended) The computer program product according to claim 19, wherein said dropping ~~of said true items~~ and said <u>replacing</u> ~~inserting of said false items~~ are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

23.   (Previously Presented) The computer program product according to claim 22, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

24.   (Currently Amended) The computer program product according to claim 19, wherein said dropping and said <u>replacing</u> ~~inserting~~ are performed independently on said transactions prior to said transactions being collected in said database.